Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A height setting system for automatically adjusting a boom position on a work vehicle, the work vehicle including a cab, a mast, a boom pivotally connected to the mast, a power device capable of moving the boom about the mast, a work tool connected to a free portion of the boom, and a boom manipulating lever operatively connected to the power device, the lever having at least one detent position, the boom including a boom arm, the system comprising:

a boom position sensor, the boom position sensor including a spring, a follower arm and a positional sensor, the spring capable of biasing the follower arm against a surface of the boom such that the follower arm contacts and follows the boom through a rotational movement of the boom, the positional sensor detecting at least one boom position;

a detent release mechanism capable of releasing the lever from the at least one detent position; and

an automatic boom position adjustment device connected to the positional sensor and operatively connected to the detent release mechanism, the automatic boom adjustment device including a switch, the switch locatable in the cab, the automatic boom position adjustment device creating at least one recorded position by recording the at least one boom position detected by the boom position sensor at an operation of the switch, the automatic boom position adjustment device moving the boom to the at least one recorded position when the lever is placed in the at least one detent position by releasing the lever, via the detent release mechanism, when the at least one recorded position is deteced via the positional sensor.

2. (Original) The height setting system of claim 1, wherein the positional sensor is electronic.

3. (Original) The height setting system of claim 1, wherein the positional sensor is a potentiometer.

4. (Previously presented) The height setting system of claim 1, wherein the

power device is a hydraulic cylinder.

5. (Original) The height setting system of claim 1, wherein the at least one detent position includes a first detent position and a second detent position and the at least one recorded position includes a first recorded position and a second recorded position.

6. (Previously presented) The height setting system of claim 5, wherein the automatic boom position adjustment device moves the boom to one of the first and the second recorded positions when the lever is placed in one of the first and the second detent positions.

7. (Original) The height setting system of claim 1, wherein the automatic boom position adjustment device includes a conventional on-board computer and a detent release mechanism electronically connected to the on-board computer, the detent release mechanism releasing the lever from the at least one detent position upon receiving a signal from the on-board computer.

8. (Previously presented) The height setting system of claim 7, wherein the automatic boom position adjustment device contains data giving a distance from a rotational center of the boom to the work tool and calculates a height of the work tool based on an angle of the boom and the distance from the rotational center of the boom to the work tool.

9. (Original) The height setting system of claim 8, wherein the automatic boom position adjustment device comprises a data entry portion for a numerical entry of the height of the work tool.

10. (Original) The height setting system of claim 9, wherein the automatic boom position adjustment device calculates and records a detected boom position based on the numerical entry.

11. (Original) The height setting system of claim 9, wherein the data entry portion comprises a keyboard and a viewing screen that displays at least one of the numerical entries and the at least one recorded position.

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Previously presented) A work vehicle for performing a work operation, the work vehicle comprising:

a frame;

ground engaging means for supporting and propelling the frame;

a mast extending upwardly from the frame;

a boom having a first boom end and a second boom end, the first boom end pivotally coupled to the mast;

a power device capable of moving the boom about the mast;

a boom manipulating lever operatively connected to the power device, the lever having at least one detent position;

a detent release mechanism capable of releasing the lever from the at least one detent position;

a work tool operatively coupled to the second boom end; and

a height setting system for automatically adjusting a boom position on the work vehicle, the system including:

a boom position detecting device, the boom position detecting device including a spring, a follower arm and a positional sensor, the spring biasing the follower arm against a surface of the boom such that the follower arm contacts and follows the boom through a rotational movement of the boom, the positional sensor detecting at least one boom position; and

an automatic boom position adjustment device connected to the positional sensor and operatively connected to the detent release mechanism, the automatic boom adjustment device including a switch, the automatic boom position adjustment device creating at least one recorded position by recording the at least one boom position detected by the boom position detecting device upon operation of the switch, the automatic boom position adjustment device moving the boom to the at least one recorded position when the lever is placed in the at least one detent position by releasing the lever via the detent release mechanism when the at least one recorded position is detected via the boom position detection device.

16. (Previously presented) The work vehicle of claim 15, wherein the at least one recorded position includes multiple recorded positions.

17. (Canceled)